



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,017	10/16/2001	B. Heath Scoggin	BUS-026166	5552

7590

03/04/2004

John S. Beulick
Armstrong Teasdale LLP
Suite 2600
One Metropolitan Sq
St. Louis, MO 63102

EXAMINER

VORTMAN, ANATOLY

ART UNIT	PAPER NUMBER
----------	--------------

2835

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,017	SCOGGIN ET AL.	
	Examiner	Art Unit	
	Anatoly Vortman	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004 (amendment).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 13-17 is/are allowed.
- 6) ☒ Claim(s) 7-10, 18 and 23 is/are rejected.
- 7) ☒ Claim(s) 11, 12 and 19-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment

1. The submission of the amendment filed on 01/05/04 is acknowledged. At this point claims 7 and 18 have been amended. Claims 1-23 are pending in the instant application.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the parallel connection of the first and second primary fuse links as recited in claims 6, 12, and 16 must be shown. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2835

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7 and 8, are rejected under 35 U.S.C. 102(b) as being anticipated by US/3,432,789 to Poehlman, Jr.

Regarding claims 7 and 8, Poehlman disclosed (Fig. 1-6) a fused disconnect switch comprising: at least one switch housing assembly comprising a switch housing (28) defining a fuse receptacle for receiving a retractable fuse and first and second terminal contact assemblies (36) extending from said receptacle, wherein said first and second contact assemblies (36) comprise a terminal stud contact assembly; and a retractable fuse comprising a fuse housing (1) containing a primary fuse link (A) and first and second fuse terminals (10) extending from said fuse housing (1), said primary fuse link (A) mechanically and electrically connected to said first and second fuse terminals (10), and an open circuit indication device (22) within said fuse housing (1) and mechanically and electrically (via pins (11)) coupled to said first and second fuse terminals (10), wherein at least a portion of said retractable fuse housing (1) is exposed from an exterior of said switch housing assembly when said retractable fuse is electrically coupled to said switch housing assembly (Fig. 1, 2), said retractable fuse being removably engageable with said switch housing assembly via said exposed portion (Fig. 2, 8).

Claim 18 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by US/5,775,940 to Tanigawa.

Tanigawa disclosed (Fig. 8-11) an identical fused disconnect device as recited in claim 18, including a first and a second primary fuse links (21) enclosed (at least partially) by a fuse housing (20, 22, 30).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poehlman ('789).

Regarding claim 10, Poehlman disclosed all of the claim limitations as apply to claim 7, but did not disclose a particular rating of the device (130 amps to 250 amps).

It would have been obvious to a person of ordinary skill in communication and/or electrical protective device arts at the time the invention was made to select any suitable range of the device ratings, including the aforementioned range of 130amps to 250 amps, in order to provide proper coordination with upstream protective devices and to provide sufficient level of protection for a load, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poehlman in view of US/6,002,580 to LeVantine et al., (LeVantine).

Regarding claim 9, Poehlman disclosed all of the claim limitations as apply to claim 7, but did not disclose the bullet-type contact assemblies.

LeVantine disclosed (Fig. 6) a protective switch for communication systems having bullet-type contact assemblies (104, 106).

Since the inventions of Poehlman, and of LeVantine are from the same field of endeavor (protective devices for power distribution in communication systems), the purpose of the bullet type contact assemblies disclosed by LeVantine would be recognized in the invention of Poehlman.

It would have been obvious to a person of ordinary skill in communication and/or electrical protective device arts at the time the invention was made to modify said device of Poehlman by providing it with bullet-type contact assemblies as taught by LeVantine, in order to enhance installation features of the device of Poehlman and to accommodate the device for particular power distribution panel and/or for particular application.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanigawa in view of US/5,355,274 to Marach et al (Marach).

Tanigawa disclosed all of the claim limitations as apply to claim 18 above, but did not disclose an electronic monitoring circuit.

Marach disclosed a fused disconnect (Fig. 1-3) comprising electronic monitoring circuit (170, 510) for monitoring the status of the fuse and to provide notification to a user (i.e. alarm) about the non-conductive status of the fuse.

Since the inventions of Marach and of Tanigawa are from the same field of endeavor (fused disconnects), the purpose of electronic monitoring circuit taught by Marach would be recognized in the invention of Tanigawa.

It would have been obvious to a person of ordinary skill in the fuse art at the time the invention was made to provide said fused disconnect of Tanigawa with monitoring circuit as taught by Marach in order to provide notification to a user (i.e. alarm) about the non-conductive status of the fuse.

Allowable Subject Matter

9. Claims 1-6 and 13-17 are allowed.

Claims 11, 12, 15, and 19-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

claims 11 and 15, each recites: “fuse alarm terminal” and “switch housing alarm terminal”;

claim 12 recites: “ fuse link extending interior to said housing”;

regarding claims 19, 20, and 22, claim 19 recites: “a bullet contact assembly”;

claim 21 recites: “a terminal stud contact assembly”;

regarding claims 1-6, claim 1 recites: “a bullet contact assembly” and “primary fuse link extending interior to said fuse housing”;

regarding claims 13-17, claim 13 recites: “a bullet contact assembly” and “primary fuse link and an open fuse indication device each extending interior to said fuse housing”.

Art Unit: 2835

The aforementioned limitations in combination with remaining limitations of the respective claims are believed to render the subject matter of the claims patentable over the art of record.

Response to Arguments

11. Regarding the objections to the drawings, the Applicant's arguments are not persuasive. The Examiner would like to reiterate that the objections have been made in light of claims 6, 12, and 16, which are directed to the embodiment depicted on Fig. 1-6. In the arguments, the Applicant has cited Fig. 9, which depicts embodiment as claimed in claims 18-23 (i.e. doubled fused disconnect assembly). Thus, the drawings do not show the claimed subject matter, i.e. the embodiment depicted on Fig. 1-6 comprising two primary fuse links connected in parallel.

Claims 6, 12, and 16 are directed to the embodiment of a fused disconnect switch having a single fuse (12) comprising a single fuse housing (32). Therefore such a fused disconnect switch having a single fuse in a single fuse housing and having two primary fuse links connected in parallel must be shown on the drawings so as to comply with the subject matter of claims 6, 12, and 16.

On the other hand, Fig. 9 is depicting a doubled fused disconnect switch having two fuse housings (32) simply attached to each other, wherein each of said fuse housings (32) contains a single fuse link (34). The figure, contrary to the Applicant's position, does not even show that said fuse links (34) are connected in parallel, since each of them is connected to their own pair of terminals (30).

Furtemore, the Examiner's discussion regarding the election of species and 35 USC 112, paragraph 1 rejection had been presented just to show the Applicant that the Examiner has the authority to associate specific claims or groups of claims with the specific drawings.

Regarding the Applicant's arguments directed to the rejection of claims 7-10 and to application of the Poehlman ('789) reference, the Examiner believes that claim 7 as amended still reads on Poehlman ('789) patent as shown in the rejection above. Also, the Examiner's interpretation of the elements of the Poehlman ('789) device is believed to be reasonable and is in line with the knowledge of one of ordinary skill in the fuse art.

Regarding the Applicant's arguments directed to the rejection of claim 18, the Applicant is advised that fuse link (21) is partially enclosed by the fuse housing (20, 22, 30).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2835

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 571-272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.V.



Anatoly Vortman
Primary Examiner
Art Unit 2835